

REMARKS

In response to the telephone interview with the Examiner granted September 3, Applicants have amended the specification as shown herein, and have also amended the claims as indicated herein. The Examiner indicated during the interview that these amendments to the specification and claim 14 would be helpful for allowance of this application.

In the final Office Action of September 2, the Examiner rejects claims 48-63 under 35 U.S.C. §112 first paragraph – enablement requirement. During the interview, this rejection was discussed and the Examiner agreed that Fig. 1 of the drawings does support the claim language “surface or surfaces outwardly spaced from said 3D volumetric 3D space visualization”. However the Examiner did request, and Applicant agreed, to amend the specification to provide supporting language based on what is shown in Fig. 1 of the drawings and corresponding to the claim language. Note that original Fig. 3 already previously defined the volume 8 as having an outward surface 45. Therefore Applicant has also now labelled this outward surface 45 in Fig. 1. Clearly the outward surface 45 is outwardly spaced from the visualization image 9 of the patient’s head and thus there is no new matter and no enablement problem.

During the interview, the Examiner also agreed that adding the word “image” after the word “visualization” would also help.

The Examiner further agreed that adding the language that the volumetric visualization image is of the three-dimensional data set in the body of the claim in addition to the preamble would also be helpful.

The Examiner rejects claims 48-63 under 35 U.S.C. §103 as unpatentable over Cosman in view of Neff further in view of Nissen. This is the same art used in the previous Office Action.

During the interview, the Examiner indicated that Fig. 12A is a three-dimensional representation of image scan data. However, as pointed out in the interview, Cosman only has a 2D imager D shown in Fig. 1, and therefore Fig. 12A is not a 3D visualization image. Rather Fig. 12A is only a representative showing of a person's head illustrating the data, but is *not* a three-dimensional visualization image which can be used by the user of the method or system. Furthermore, Fig. 12A teaches directly away from the invention by putting the reference points such as 924, 928, 926 and 920 directly on the visualization image rather than on a surface which is spaced from the visualization image.

As further explained during the interview and as pointed out in Applicant's Amendment B, the geology reference Neff has nothing to do with three-dimensional 3D space visualization. Neff teaches directly away in Fig. 2 by providing a concave solid surface for the image. Claim 14 as amended herein clearly recites that the 3D volumetric visualization image of the three-dimensional data set is not on a solid surface but in 3D space as shown in Applicant's Fig. 1. This language was also added in the specification and is clearly not new matter, since drawing Fig. 1 clearly shows the head image 9 in 3D space and not on a solid surface. In Neff the image is on a solid surface at 26B in Fig. 2 and thus Neff teaches directly away and is not combinable with Takeyama to suggest the invention.

As previously explained in prior amendments, the secondary Nissen reference only shows displacement of an image in a 2D plane by direction and distance and is

not an obvious combination with Neff and/or Kageyama relating to a three-dimensional visualization image.

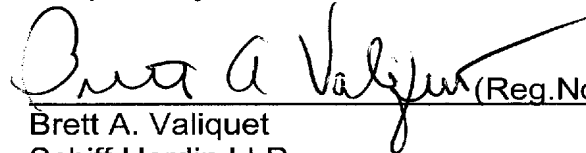
Also as previously argued, Cosman clearly does not teach any reference point on the surface outwardly spaced from the visualization image. Cosman teaches directly away from this by putting his reference points directly on the visualization image.

Dependent claims 49-63 distinguish at least for the reasons noted with respect to claim 48 and also by citing additional features not suggested.

Allowance of the application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Respectfully submitted,

 (Reg.No.27,841)

Brett A. Valiquet
Schiff Hardin LLP
Patent Department
6600 Sears Tower
Chicago, Illinois 60606
Telephone: (312) 258-5786
Attorneys for Applicants.
CUSTOMER NO. 26574

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